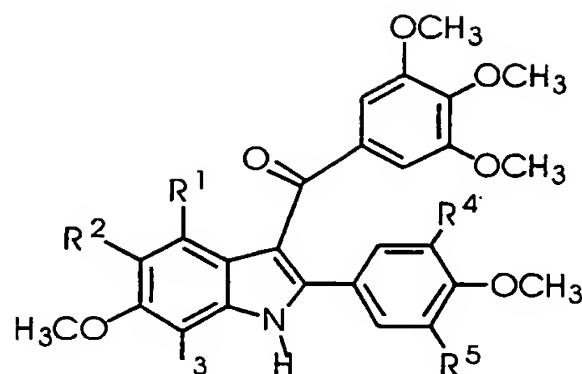


What is claimed is:

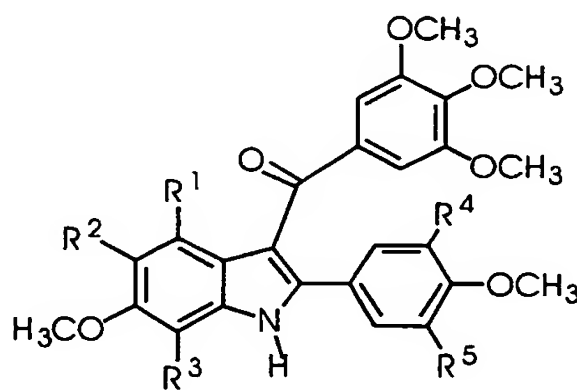
1. A compound of the structure:



wherein

- 5  $R^1$  through  $R^5$  contain at least one phenolic moiety or at least one amine group ( $NH_2$ ,  $NHR^1$ , or  $NR^6R^7$  where  $R^6$  and  $R^7$  are the same or different alkyl having up to 8 carbon atoms), benzyl, or aryl while the remaining  $R^1$  through  $R^5$  are hydrogen.

2. A compound of the structure:

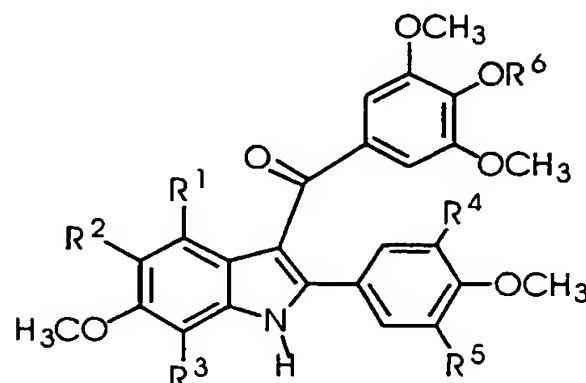


wherein

- 5  $R^1$  through  $R^5$  contain at least one phosphate ester moiety ( $-OP(O)(O^+M^-)_2$ ) or a phosphoramidate ( $-NP(O)(O^+M^-)_2$ ) where M is a cation or ( $-NP(O)(OR)_2$ ) where

R is an alkyl with up to 8 carbon atoms (the two R groups are the same or different, benzyl, or aryl while the remaining R<sup>1</sup> through R<sup>5</sup> are hydrogen.

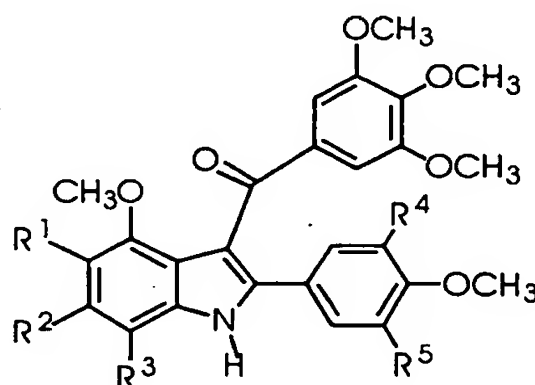
3. A compound of the structure:



wherein

R<sup>1</sup> through R<sup>5</sup> contain at least one phosphate ester moiety (-OP(O)(O<sup>-</sup>M<sup>+</sup>)<sub>2</sub>) or a phosphoramidate (-NP(O)(O<sup>-</sup>M<sup>+</sup>)<sub>2</sub>) where M is a cation or (-NP(O)(OR)<sub>2</sub>) where R is an alkyl with up to 8 carbon atoms (the two R groups are the same or different), benzyl, or aryl while the remaining R<sup>1</sup> through R<sup>5</sup> are hydrogen, and R<sup>6</sup> is hydrogen or alkyl.

4. A compound of the structure:

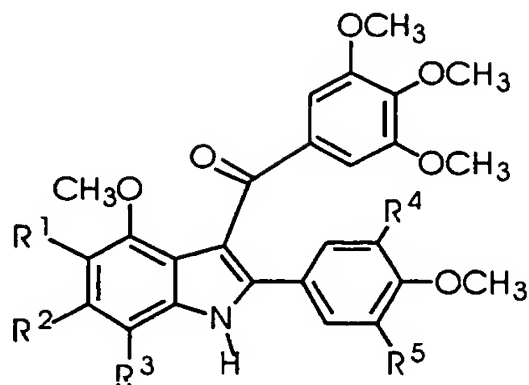


wherein

R<sup>1</sup> through R<sup>5</sup> contain at least one phenolic moiety or at least one amine (NH<sub>2</sub>, NHR<sup>1</sup>, or NR<sup>6</sup>R<sup>7</sup> where R<sup>6</sup> and R<sup>7</sup> the same or different alkyl having up to 8

carbon atoms, benzyl, or aryl groups) while the remaining  $R^1$  through  $R^5$  are a hydrogen.

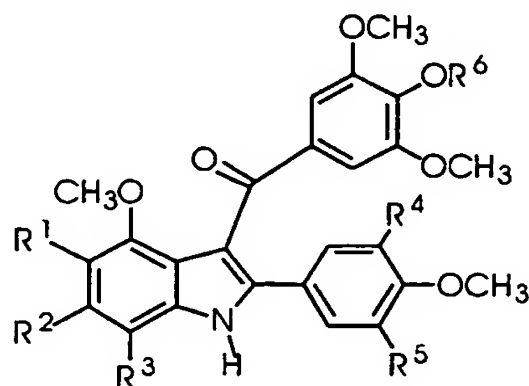
5. A compound of the structure:



wherein

- 5  $R^1$  through  $R^5$  contain at least one phosphate ester moiety ( $-\text{OP}(\text{O})(\text{O}^-\text{M}^+)_2$ ) or a phosphoramidate ( $-\text{NP}(\text{O})(\text{O}^-\text{M}^+)_2$ ) where M is a cation or ( $-\text{NP}(\text{O})(\text{OR})_2$ ) where R is an alkyl with up to 8 carbon atoms (the two R groups are the same or different), benzyl, or aryl while the remaining  $R^1$  through  $R^5$  are hydrogen.

6. A compound of the structure:

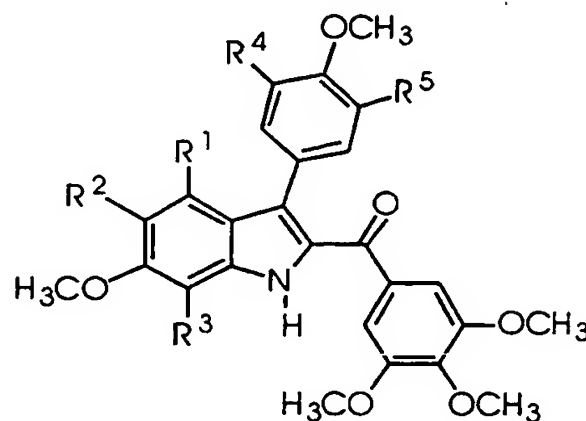


wherein

- 5  $R^1$  through  $R^5$  contain at least one phosphate ester moiety ( $-\text{OP}(\text{O})(\text{O}^-\text{M}^+)_2$ ) or a phosphoramidate ( $-\text{NP}(\text{O})(\text{O}^-\text{M}^+)_2$ ) where M = a cation or ( $-\text{NP}(\text{O})(\text{OR})_2$ ) where

R is an alkyl with up to 8 carbon atoms (the two R groups are the same or different), or benzyl, or aryl groups, while the remaining R<sup>1</sup> through R<sup>5</sup> are a hydrogen and R<sup>6</sup> is hydrogen or alkyl.

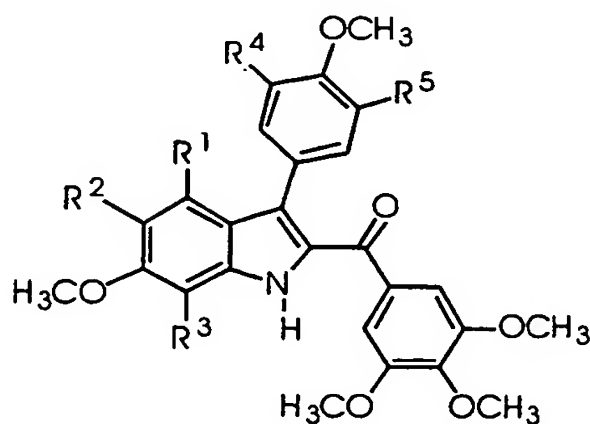
7. A compound of the structure:



wherein

R<sup>1</sup> through R<sup>5</sup> contain at least one phenolic moiety or at least one amine group (NH<sub>2</sub>, NHR or NR<sup>6</sup>R<sup>7</sup> where R<sup>6</sup> and R<sup>7</sup> are the same or different alkyl having up to 8 carbon atoms may be the same or different), or benzyl, or aryl groups) while the remaining R<sup>1</sup> through R<sup>5</sup> are a hydrogen.

8. A compound of the structure:

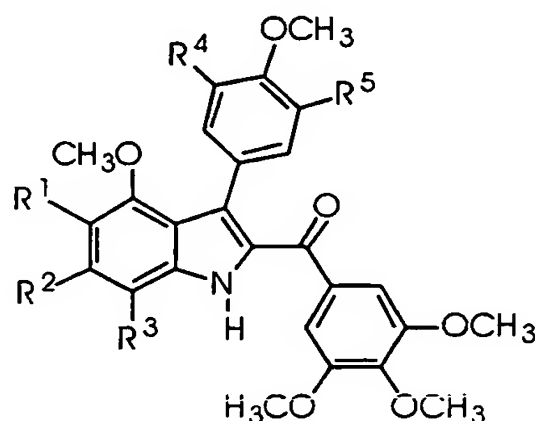


wherein



$R^1$  through  $R^5$  contain at least one phenolic moiety or at least one amine group ( $NH_2$ ,  $NHR^1$ , or  $NR^6R^7$  where  $R^6$  and  $R^7$  are the same or different alkyl having up to 8 carbon atoms, benzyl, or aryl) while the remaining  $R^1$  through  $R^5$  are a hydrogen.

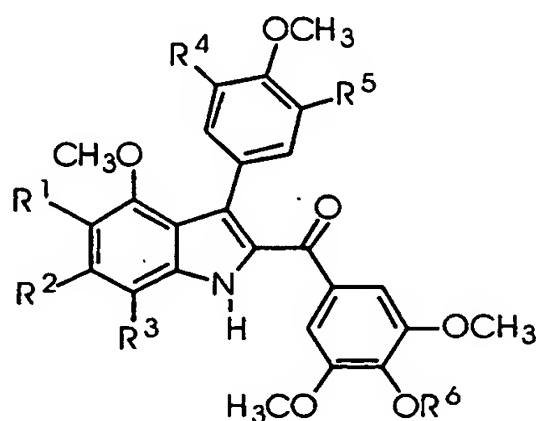
11. A compound of the structure:



wherein

$R^1$  through  $R^5$  contain at least one phosphate ester ( $-OP(O)(O^-M^+)_2$ ) or a phosphoramidate ( $-NP(O)(O^-M^+)_2$ ) where M is a cation or ( $-NP(O)(OR)_2$ ) where R is an alkyl with up to 8 carbon atoms (the two R groups are the same or different), benzyl, or aryl, while the remaining  $R^1$  through  $R^5$  are hydrogen.

12. A compound of the structure:

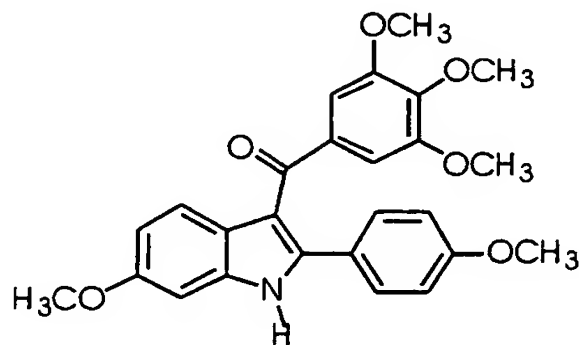


wherein

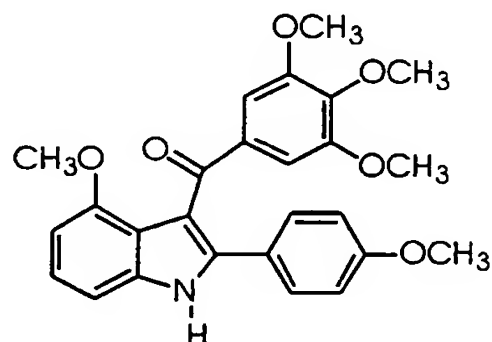
$R^1$  through  $R^5$  contain at least one phosphate ester moiety ( $-OP(O)(O^-M^+)_2$ ) or a phosphoramidate ( $-NP(O)(O^-M^+)_2$ ) where M is a cation or ( $-NP(O)(OR)_2$ ) where R is an

alkyl with up to 8 carbon atoms (the two R groups are the same or different), benzyl, or aryl while the remaining R<sup>1</sup> through R<sup>5</sup> are hydrogen, and R<sup>6</sup> is hydrogen or alkyl.

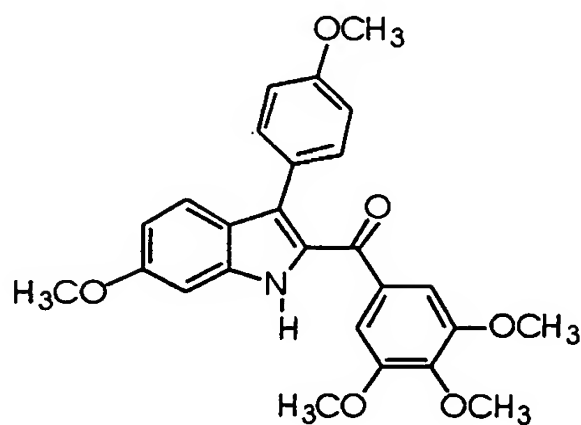
13. A compound of the structure:



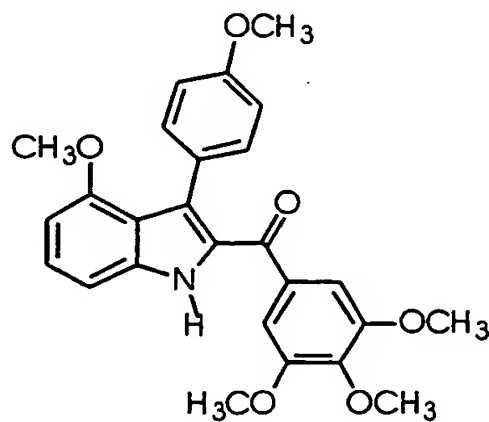
14. A compound of the structure:



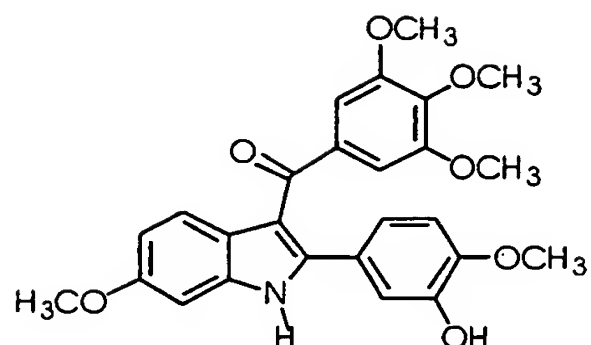
15. A compound of the structure:



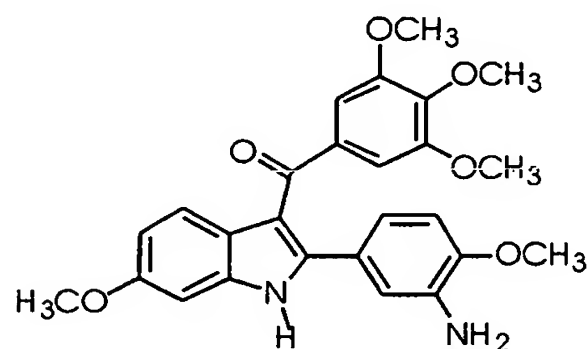
16. A compound of the structure:



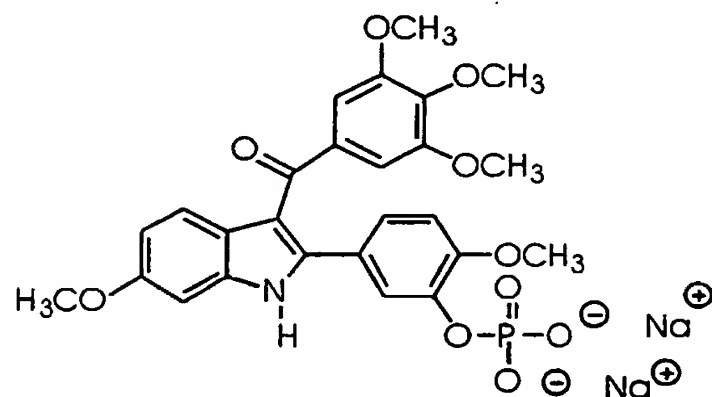
17. A compound of the structure:



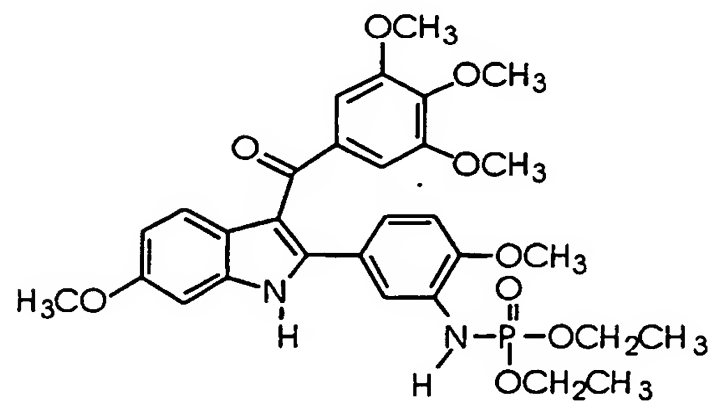
18. A compound of the structure:



19. A compound of the structure:



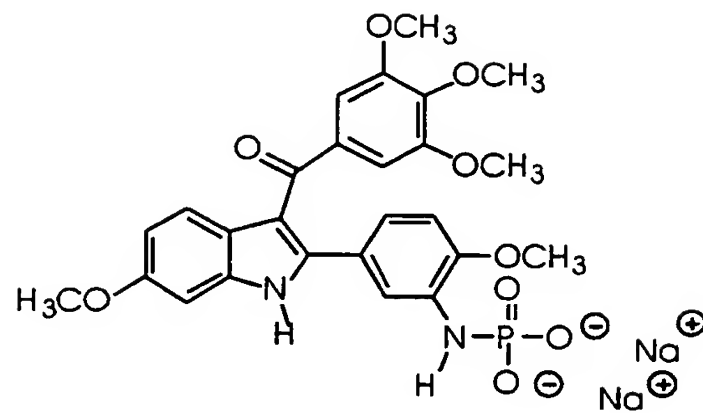
20. A compound of the structure:



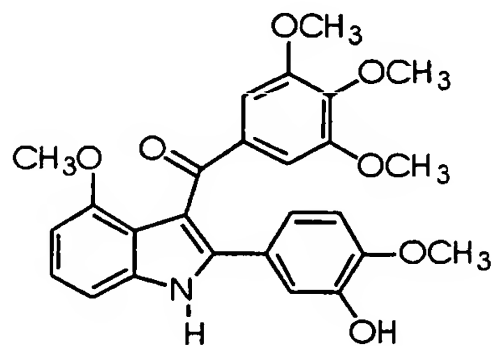


34

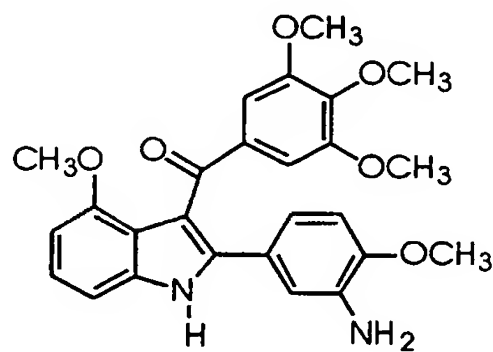
21. A compound of the structure:



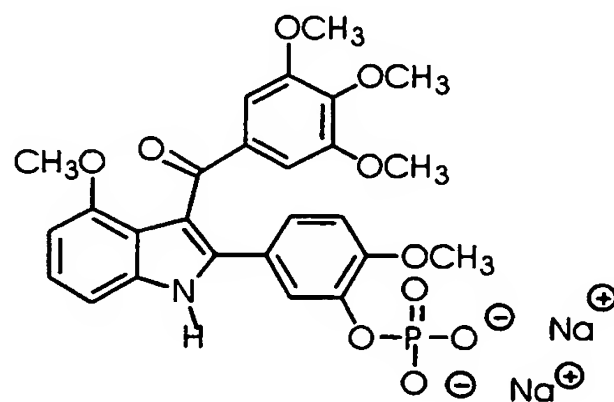
22. A compound of the structure:



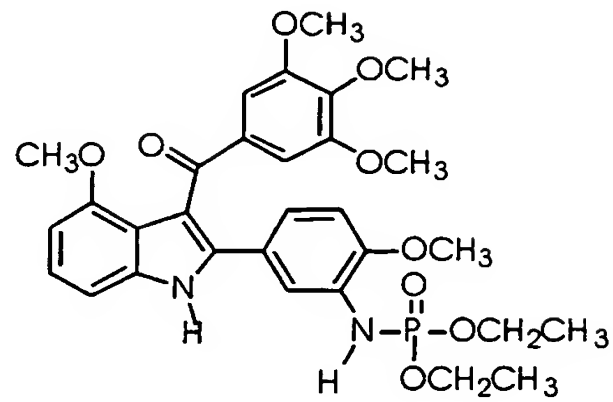
23. A compound of the structure:



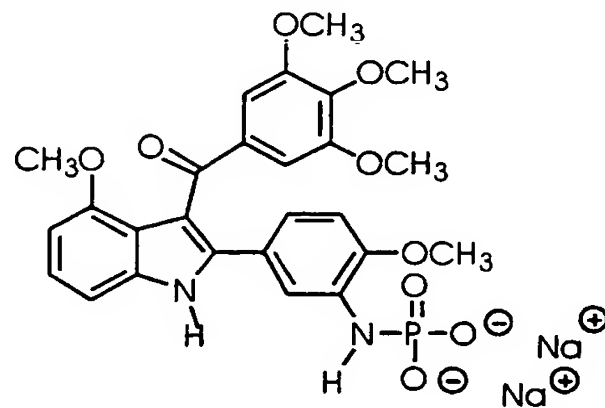
24. A compound of the structure:



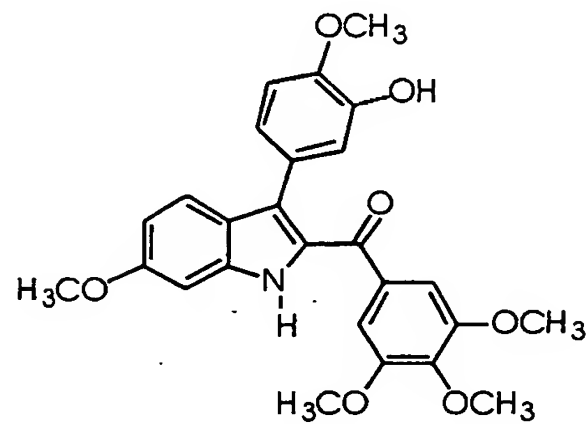
25. A compound of the structure:



26. A compound of the structure:

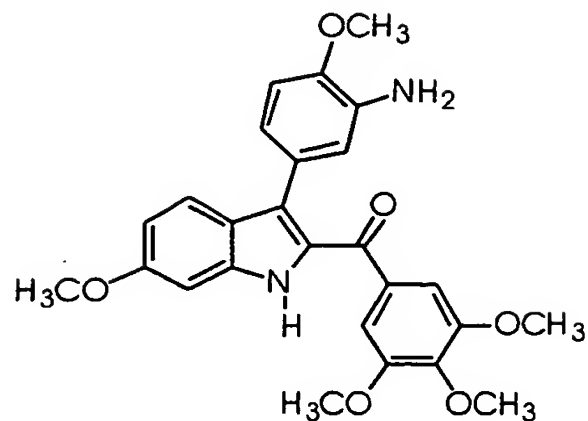


27. A compound of the structure:

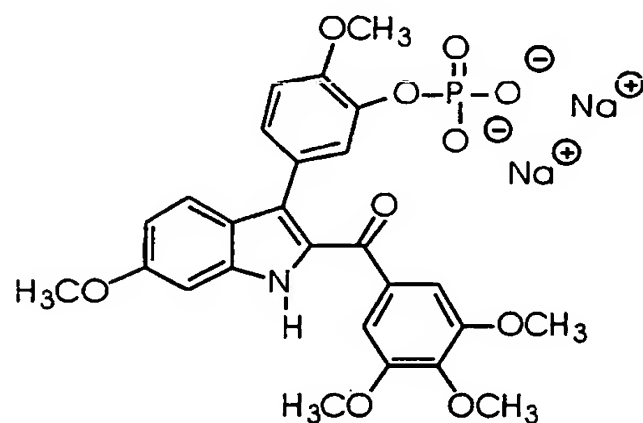


36

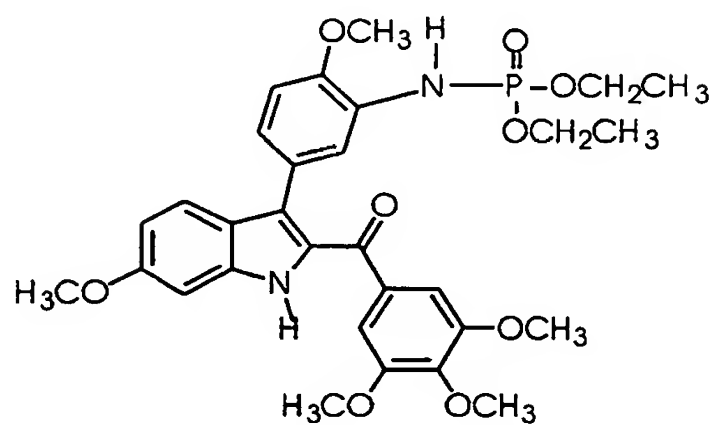
28. A compound of the structure:



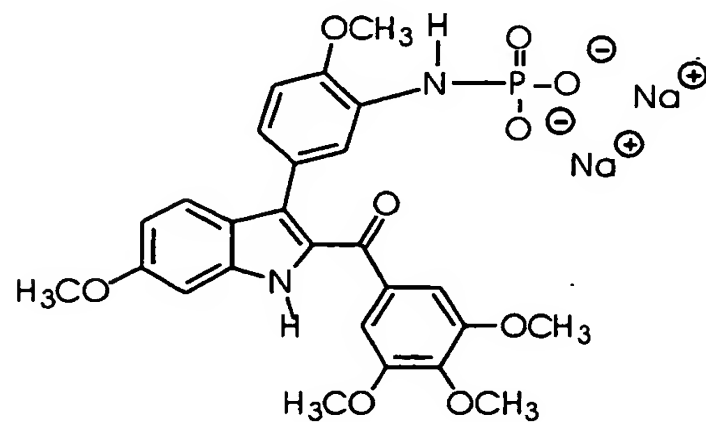
29. A compound of the structure:



30. A compound of the structure:

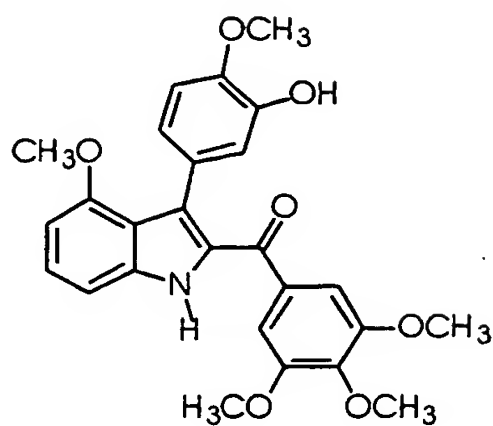


31. A compound of the structure:

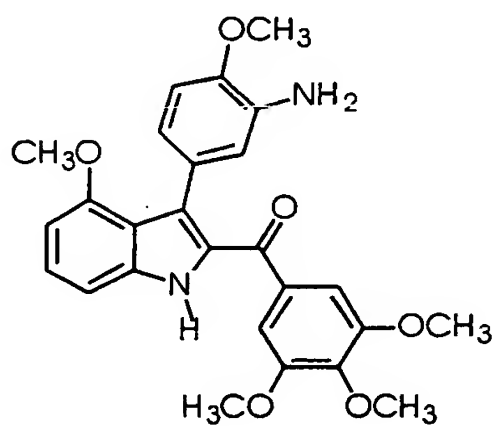


37

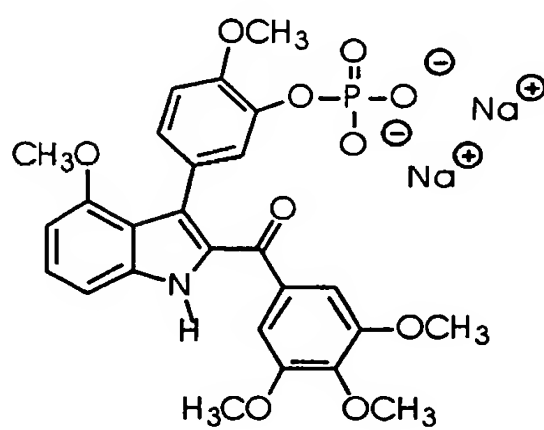
32. A compound of the structure:



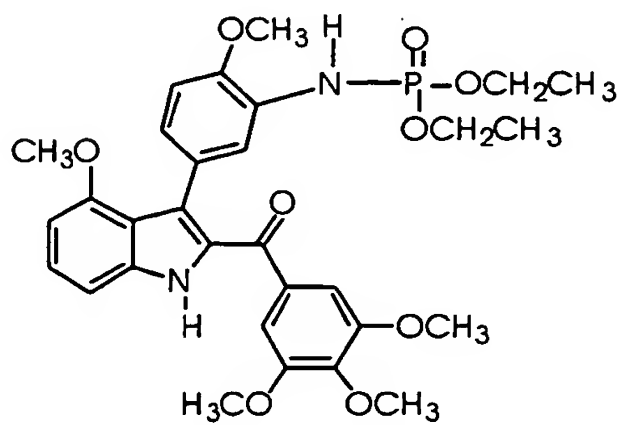
33. A compound of the structure:



34. A compound of the structure:

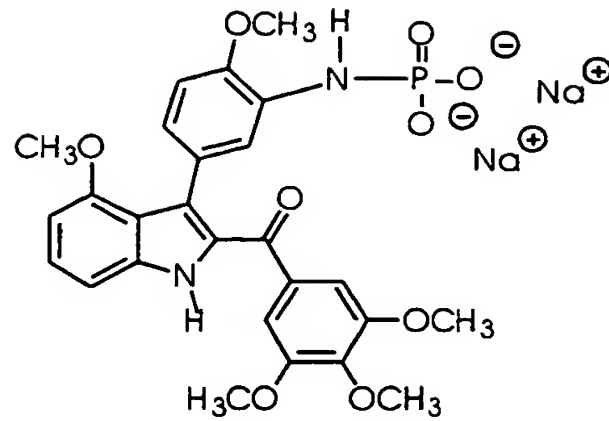


35. A compound of the structure:

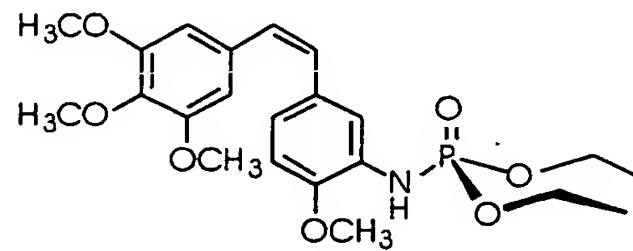


38

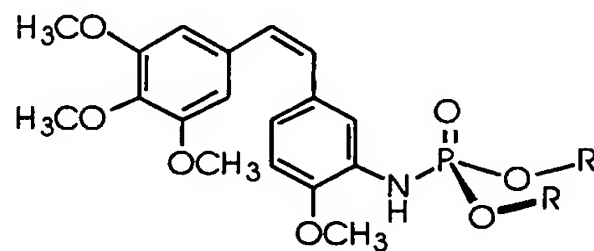
36. A compound of the structure:



37. A compound of the structure:



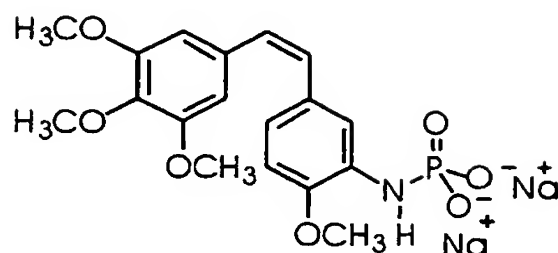
38. A compound of the structure:



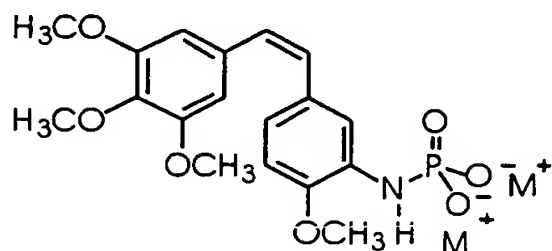
wherein

R is chosen to be any appropriate alkyl or branched alkyl having up to 8 carbon atoms, the two R groups may be the same or different.

39. A compound of the structure:



40. A compound of the structure:



wherein

$\text{M}^+$  is a cation.

41. A method for inhibiting tubulin polymerization by contacting a tubulin-containing system with an effective amount of a compound described in any of claims 1-40.

42. The method of claim 41 wherein said system is in a tumor cell.

43. A method of treating a host afflicted with a neoplastic disease by administering to said host a compound described in any of claims 1-40.

44. The method of claims 41, wherein the contacted system is located in a patient.

45. The method of claim 41 described further as for treating cancer, wherein said cancer may be chosen from the group containing leukemia, lung, colon, thyroid, CNS, melanoma, ovarian, renal, prostate, and breast cancers.

46. A preparation for pharmaceutical use containing a compound from any of claims 1-40 as an active component along with a pharmaceutically acceptable carrier.

47. A method for selectively targeting and destroying tumor vasculature comprising administering an effective amount of a compound described in any of claims 1-40.